

Johnson County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

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Using the most recent IMPLAN data available (2014) adjusted for 2016, 43 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Johnson County economy.¹

These 43 sectors have a total direct output of approximately **\$3.3 billion** and support **7,724.3 jobs** in Johnson County. Running the model for all 43 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Johnson County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	7,724.3	1.76%	\$759,354,782.69	1.80%	\$3,297,565,029.13	7.83%
Indirect Effect	4,440.7	1.01%	\$567,707,466.42	1.35%	\$1,022,020,643.06	2.43%
Induced Effect	4,020.4	0.91%	\$345,952,455.81	0.82%	\$565,616,286.41	1.34%
Total Effect	16,185.4	3.68%	\$1,673,014,704.92	3.97%	\$4,885,201,958.59	11.60%

As shown in the above table, agriculture, food, and food processing sectors support **16,185.4 jobs**, or **3.55%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$4.9 billion**, roughly **11.60% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 43 agriculture, food, and food processing sectors is approximately **\$1.6 billion**, or **3.97% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **3.97% of the total economy**.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the landscape and horticultural services sector is the top employer with **3,235.3 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Johnson County.

Top Ten Sectors by Employment		
Sector	Total Employment	Total Output
Landscape and horticultural services	3235.3	\$239,694,240.06
Wholesale trade	1264.0	\$353,983,145.42
Veterinary services	1140.6	\$111,614,056.85
Bread and bakery product, except frozen, manufacturing	566.4	\$71,179,832.68
Other animal food manufacturing	481.3	\$746,316,358.92
Spice and extract manufacturing	411.2	\$249,057,947.36
Full-service restaurants	352.4	\$16,253,477.21
Real estate	346.9	\$78,958,977.06
Management of companies and enterprises	310.9	\$73,429,637.85
Bottled and canned soft drinks & water	310.8	\$254,637,998.96

The other animal food manufacturing sector directly contributes approximately **\$746.3 million** to the Johnson County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry..

Top Ten Sectors by Output		
Sector	Total Employment	Total Output
Other animal food manufacturing	481.3	\$746,316,358.92
Fats and oils refining and blending	276.9	\$564,064,601.90
Soybean and other oilseed processing	98.2	\$525,908,775.85
Wholesale trade	1264.0	\$353,983,145.42
Bottled and canned soft drinks & water	310.8	\$254,637,998.96
Spice and extract manufacturing	411.2	\$249,057,947.36
Landscape and horticultural services	3235.3	\$239,694,240.06
Dog and cat food manufacturing	107.8	\$153,125,828.18
Veterinary services	1140.6	\$111,614,056.85
Nitrogenous fertilizer manufacturing	53.9	\$90,692,287.50

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Johnson County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	6.6	\$6,041,164.10
Grain farming	11.8	\$3,427,357.13
Vegetable and melon farming	3.2	\$523,741.04
Fruit farming	4.6	\$443,729.62
Tree nut farming	0.0	\$1,118.82
Greenhouse, nursery, and floriculture production	28.7	\$4,221,925.62
All other crop farming	46.1	\$2,842,166.02
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	234.1	\$20,936,902.49
Dairy cattle and milk production	5.6	\$1,585,538.10
Poultry and egg production	0.4	\$217,585.85
Animal production, except cattle and poultry and eggs	300.2	\$25,830,600.46
Commercial logging	6.9	\$371,512.65
Dog and cat food manufacturing	107.8	\$153,125,828.18
Other animal food manufacturing	481.3	\$746,316,358.92
Flour milling	21.0	\$33,040,407.64
Malt manufacturing	34.9	\$64,397,882.91
Soybean and other oilseed processing	98.2	\$525,908,775.85
Fats and oils refining and blending	276.9	\$564,064,601.90
Nonchocolate confectionery manufacturing	6.5	\$3,057,783.04
Chocolate and confectionery manufacturing from cacao beans	23.5	\$17,222,059.31
Confectionery manufacturing from purchased chocolate	28.2	\$7,751,177.39
Meat processed from carcasses	8.4	\$4,366,934.56
Poultry processing	3.3	\$1,050,680.65
Bread and bakery product, except frozen, manufacturing	566.4	\$71,179,832.68
Frozen cakes and other pastries manufacturing	29.9	\$5,023,471.50
Cookie and cracker manufacturing	10.9	\$5,907,878.20
Dry pasta, mixes, and dough manufacturing	116.9	\$69,546,334.37
Coffee and tea manufacturing	21.9	\$14,588,284.68
Spice and extract manufacturing	411.2	\$249,057,947.36
All other food manufacturing	76.7	\$29,266,920.85
Bottled and canned soft drinks & water	310.8	\$254,637,998.96
Breweries	7.8	\$6,422,815.03
Wineries	15.1	\$3,538,290.99
Distilleries	39.6	\$42,099,714.79

Paper mills	23.4	\$18,456,631.38
Paperboard mills	0.4	\$1,317,142.22
Nitrogenous fertilizer manufacturing	53.9	\$90,692,287.50
Phosphatic fertilizer manufacturing	1.4	\$6,778,136.31
Lawn and garden equipment manufacturing	3.1	\$1,731,534.00
Food product machinery manufacturing	6.4	\$2,099,426.99
All other industrial machinery manufacturing	54.7	\$15,804,899.56
Veterinary services	1140.6	\$111,614,056.85
Landscape and horticultural services	3235.3	\$239,694,240.06

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Johnson County, the retail sector was omitted.